

ABSTRACT OF THE DISCLOSURE

1 An improved disposable glucose test strip for use in a test meter of the
2 type which receives a disposable test strip and a sample of blood from a patient and
3 performs an electrochemical analysis is made using a non-conductive integrated
4 reagent/blood separation layer containing a filler, an enzyme effective to oxidize glucose,
5 e.g., glucose oxidase, and a mediator effective to transfer electrons from the enzyme. The
6 integrated layer formulation is printed over a conductive carbon element to form a
7 working electrode. The filler, for example a silica filler, is selected to have a balance of
8 hydrophobicity and hydrophilicity such that one drying it forms a two-dimensional
9 network on the surface of the conductive element. The response of this test strip is
10 essentially temperature independent over relevant temperature ranges and is substantially
11 insensitive to the hematocrit of the patient.